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EXAMINER				
KASHNIKOW, ERIK				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/564,593

Applicant(s)

SANKEY ET AL.

Examiner

ERIK KASHNIKOV

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28, 31 and 33-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28, 31 and 33-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 02/21/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It was not executed in accordance with either 37 CFR 1.66 or 1.68.

Claim Objections

2. Claims 2-21 and 23-38 are objected to because of the following informalities: These claims are objected to since they do not have the proper format to have proper antecedent basis. In order to have proper antecedent basis they should recite "The film" or "The process".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-28, 31 and 33-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The term "less than about" in claim 1, 22, 31 and 34-36 is a relative term which renders the claim indefinite. The term "less than about" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

6. Claims 16 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The specific claims are rejected to because of the term "preferably wherein" makes it unclear whether the ratios are required, or just preferred.

7. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 16 and 17

recites the broad recitation "preferably wherein the range is between" 65:35 and 85:15 (claim 16) or 30:70 and 35:65 (claim 17), and the claims also recites "more preferably" 82:18 (claim 16) 33:67 (claim 17) which is the narrower statement of the range/limitation.

8. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically claim 23 is rejected for the statement "wherein the unperforated layer and/or substrate layer are as set out in claims 2, 3, 11, or 12" given that the scope of the claim is confusing given that claims 2, 3, 11, or 12 are each drawn to film not unperforated layer and/or substrate layer.

9. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim is rejected because claim 27 is drawn to a process but depends on claim 21 which is drawn to a film, which renders the claim unclear and indefinite.

10. Claims 34 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are rejected to because they are drawn to a method of packaging cut plants but there are no method steps regarding the packaging of the plants.

Claim Rejections - 35 USC § 103

11. Claims 1-5, 8-10, 12-15, 20-24, 27, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175).
12. In regards to claims 1, 3, 4, 9, 10, 22 and 23 Akao teaches a laminate sheet used in packaging (column 1 lines 5-7). Akao teaches a laminate of a thermoplastic resin and a flexible sheet (column 1 line 65 column 2 line1). Akao teaches that one of the layers is perforated (column 2 lines 32-35). Akao teaches that the perforated layer has a degree of perforation of 10-90% (column 3 lines 33-39). Akao teaches that the diameter of the perforations be between 0.5-25mm (column 3 lines 55-60). In regards to the barrier layer, Akao teaches polypropylene and PET as materials that can be used as the barrier layer (column 4 lines 10 and 14). Akao teaches that the barrier layer be 15-120 microns (column 5 lines 30-33). While the lower end of the range is above Applicant's, Akao disclose the use of 15 micron films, while the present claims require films of about 12 microns. It is apparent, however, that the instantly claimed amount of about 12 and that taught by Akao are so close to each other that the fact pattern is similar to the one in In re Woodruff, 919 F.2d 1575, USPQ2d 1934 (Fed. Cir. 1990) or Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed.Cir. 1985) where despite a "slight" difference in the ranges the court held that such a difference did not "render the claims patentable" or, alternatively, that "a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough so that one skilled in the art would have expected them to have the same properties".

In light of the case law cited above and given that there is only a "slight" difference between the amount of 15 microns disclosed by Akao and the amount disclosed in the present claims, it therefore would have been obvious to one of ordinary skill in the art that the amount of about 12 microns disclosed in the present claims is but an obvious variant of the amounts disclosed in (reference name), and thereby one of ordinary skill in the art would have arrived at the claimed invention. In regards to the methods Akao teaches methods for making the films in the examples, starting in column 9. Since Akao teaches the same materials used in the same manner as applicants the breathability of the sheet is intrinsic.

13. In regards to claims 2, 20 and 21 since Akao teaches the same materials used in the barrier layer, the properties would be intrinsic.

14. In regards to claim 5 Akao teaches that the flexible layer, herein the barrier layer, is disposed on at least one side of the substrate layer (column 1 lines 35-49).

In regards to claim 8, since Akao teaches perforation diameters and rates which overlap with those presently claimed (as discussed above) it has been found that absent a showing of criticality with respect to "perforations per (25mm)²" (a result effective variable), it would have been obvious to a person of ordinary skill in the art at the time of the invention to adjust the "perforations per (25)mm²" through routine experimentation to values, including those presently claimed in order to achieve "a packaging film with the appropriate amount of vents to control the moisture and gas barrier properties" (column 1 lines 25-30). It has been held that discovering an optimum value of a result effective

variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

In regards to claims 12 and 13 Akao teaches that the perforated layer (substrate layer) may comprise PET (column 2 lines 25-30).

15. In regards to claim 14 Akao as previously stated teach that the substrate layer may be a polyester layer, which is also an example given by Akao for a heat sealable layer. Therefore the substrate layer could also act as a heat sealable layer (column 7 lines 50-65).

16. In regards to claim 15 this is just a duplication of parts (See MPEP 2144.04 VI) since Akao has previously stated that polyesters can be used as both a heat seal layer and the substrate layer. The courts have held that mere duplication of parts has no patentable significance unless it results in a new and unexpected result.

17. In regards to claim 24 Akao teaches that the unperforated layer is laminated to the perforated layer (column 9 lines 35-50).

18. In regards to claim 27 Akao teaches that films are formed by extrusion coating (column 9 lines 37-42).

19. In regards to claim 36 Akao et al. teach that the film may be formed into a container (column 12 lines 1-17). In regards to the limitation that the package is for an ovenable meal, since the package is made of the same materials in the same way it would inherently be suitable for an ovenable meal.

20. Claims 1-10, 12-15, 20-24, 27, 28, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of Akao (US 4,661,401).
21. As taught above Akao 175 teaches films for use in packaging which has a perforated layer laminated to an unperforated layer, but however is silent regarding the lower range of thickness of Applicant's invention.
22. Akao 401 also teaches films used for packaging.
23. In regards to claims 1, 6, 7 and 28 Akao 401 teaches the use of L-LDPE as an outer layer (401 column 3 lines 48-67), a compound also taught by Akao 175 as useful for an outer layer (175 column 4 lines 1-17). Akao 401 teaches these layers can be 5-120 microns thick, which overlaps with Applicant's ranges (401 column 4 lines 38-41).
24. All other limitations of the other claims have been discussed above.
25. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Akao 175 with that of Akao 401 because Akao 175 which offers reduction in weight of packages as well as prevention in breakage of packages (175 column 1 lines 25-30) would benefit from the improved resistance to impact without reduction of cushioning of Akao 401 (401 column lines 15-20).
26. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of Rogers (US 4,918,156).
27. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding using copolyesterether as the substrate.

28. Rogers teaches polyester resins which offer improved processability during manufacture (column 1 lines 5-6).

29. Rogers teaches that this polyester is a copolyesterether formed from 1,4-cyclohexanedimethanol (column 1 lines 5-10).

30. One of ordinary skill in the art at the time of the invention would be motivated to modify the package of Akao with the polyester of Rogers, because the polyester of Rogers offers improved processability during manufacture (column 1 lines 5-10) and a decrease in film splitting (column 2 lines 49-50).

31. Claim 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of Dominguez De Walter et al. (US 6,787,630 and hereinafter Dominguez).

32. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding the heat sealable layer comprising ethylene glycol, terephthalic and isophthalic acid.

33. Dominguez teaches heat stable polyesters which are easily reproduced (column 1 lines 7-10).

In regards to claim 16 Dominguez teaches copolyesters derived from ethylene glycol, and terephthalic and isophthalic acid (column 13 lines 1-10). In regards to the concentrations it has been found that absent a showing of criticality with respect to "acid ratios" (a result effective variable), it would have been obvious to a person of ordinary skill in the art at the time of the invention to adjust the "acid ratios" through routine

experimentation to values, including those presently claimed in order to achieve "polyesters with good color, and reduced degradation". It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

34. One of ordinary skill in the art at the time of the invention would be motivated to modify the package of Akao with the copolyester of Dominguez because the copolyester of Dominguez offers outstanding clarity and coloring neutrality (column 1 lines 15-16).

35. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of McConnell et al. (US 4,450,250).

36. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding a copolyester derived from ethylene glycol, terephthalic acid and cyclohexanedimethanol.

37. McConnell et al. teach adhesive polymers.

38. In regards to claim 17 McConnell et al. teach a known adhesive polymer which is derived from ethylene glycol, terephthalic acid as well as 1,4-cyclohexanedimethanol (column 3 lines 51-60).

39. One of ordinary skill in the art at the time of the invention would be motivated to modify the film of Akao with the polyester adhesive of McConnell et al. because the adhesive composition of McConnell et al. which is well known in the art offers an ability

to bind to a wide variety of materials as well as offering good cohesive and bond strengths and improved processing characteristics (column 1 lines 11 and 18-23).

40. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akao. (US 4,587,175) in view of Harrington (US 4,172,824).

41. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding a specific heat seal composition comprising an aromatic dicarboxylic acid, and aliphatic dicarboxylic acid and a glycol.

In regards to claims 18 and 19 Harrington et al. teach a hot melt adhesive compound which comprises terephthalic acid and adipic acid and the glycol component is ethylene glycol (column 2 lines 20-30). Harrington et al. disclose the use of about 60% aromatic dicarboxylic, while the present claims require 55% aromatic dicarboxylic.

It is apparent, however, that the instantly claimed amount of 55% and that taught by Harrington et al. are so close to each other that the fact pattern is similar to the one in In re Woodruff, 919 F.2d 1575, USPQ2d 1934 (Fed. Cir. 1990) or Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed.Cir. 1985) where despite a "slight" difference in the ranges the court held that such a difference did not "render the claims patentable" or, alternatively, that "a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough so that one skilled in the art would have expected them to have the same properties".

In light of the case law cited above and given that there is only a "slight" difference between the amount of about 60% disclosed by Harrington and the amount disclosed in the present claims, it therefore would have been obvious to one of ordinary skill in the art that the amount of 55% disclosed in the present claims is but an obvious variant of the amounts disclosed in Harrington et al., and thereby one of ordinary skill in the art would have arrived at the claimed invention.

42. One of ordinary skill in the art at the time of the invention would be motivated to modify the film of Akao with the polyester component of Harrington et al. because the polyester component of Harrington et al. offers an excellent softening points and inherent viscosities (column 2 lines 22-33).

43. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of Wang et al. (6,143,818).

44. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding the method of applying the adhesive and using EVOH as an adhesive.

45. In regards to claim 25 Wang et al. teach spray melt blown methods as common methods for applying adhesives (column 1 lines 50-57).

46. In regards to claim 26 Wang et al. teach an adhesive which comprises ethylene vinyl alcohol (claim 11).

47. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Akao et al. with the adhesive of Wang et al. because the

adhesives of Wang et al. offer improved cohesive strength as well as excellent heat stability (column 3 lines 20-27).

48. Claims 31, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of Zobel (US 5,832,699).

49. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding cut plants being included in the container.

50. Zobel teaches films which comprise a perforated layer (column 4 lines 1-20).

51. In regards to claims 31 34 and 35 Zobel et al. teach that it is known in the art that films with perforations are used to store vegetables, which are cut plant material (column 3 lines 55-63).

52. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Akao with that of Zobel et al. because the invention of Zobel et al. offers an ability to regulate a changing atmosphere in a package (column 1 lines 17-30).

53. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of Varriano-Martson (US 6,441,340 hereinafter Varriano).

54. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding the film being used as a lid for a package.

55. In regards to claim 33 Varriano teaches containers with lids made from breathable films (column 18 lines 36-50).

56. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Akao with that of Varriano because the invention of Akao would benefit from the modifying or controlling flow of oxygen and carbon dioxide in and out of a container (column 1 lines 14-20).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIK KASHNIKOW whose telephone number is (571)270-3475. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Erik Kashnikow
Examiner
Art Unit 1794

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794

